

418 YRGAVLEPIRGVHENIAVLDFSSMYPNIMIKYNGPDTLVRPGEKCGEC-GCWRAPEVK 476

01. #10



QY 421 ATVEPLGCVHNIIVLDFSSMTPTNMTKYNVDPDLVPRGKCGCGCAEPEVKRFR 480  
 DB 421 ATVEPLGCVHNIIVLDFSSMTPTNMTKYNVDPDLVPRGKCGCGCAEPEVKRFR 480  
 QY 481 RCPGFFKTVLRLLELRKRVRAEMKYPDPSPRYLLDROKALKYLANASGYMGWG 540  
 DB 481 RCPGFFKTVLRLLELRKRVRAEMKYPDPSPRYLLDROKALKYLANASGYMGWG 540  
 QY 541 ARMYCRECAKAVTANGRHILRTAINIARKLGKLYIGDTSLEFVYDPEKVENFIKIKE 600  
 DB 541 ARMYCRECAKAVTANGRHILRTAINIARKLGKLYIGDTSLEFVYDPEKVENFIKIKE 600  
 QY 601 ELGFEIKLEKTKYKRLFTTAKKRYAGLLEDGRIDIVGFEAVRGDMCELAKEVQTKVEIV 660  
 DB 601 ELGFEIKLEKTKYKRLFTTAKKRYAGLLEDGRIDIVGFEAVRGDMCELAKEVQTKVEIV 660  
 QY 661 LKTSVNNKAVYVYKIVKLEBKVPIEKLVTIKTSLKEETTEAPHYVAAKRLMSAG 720  
 DB 661 LKTSVNNKAVYVYKIVKLEBKVPIEKLVTIKTSLKEETTEAPHYVAAKRLMSAG 720  
 QY 721 YRVSPGDKIGYIVYKGGRIISQRAPEYFMVKDPSQIDVTYYVHDIIPALRLILGYGIT 780  
 DB 721 YRVSPGDKIGYIVYKGGRIISQRAPEYFMVKDPSQIDVTYYVHDIIPALRLILGYGIT 780  
 QY 781 EKQKASATGOKTLPDPLAKSK 803  
 DB 781 EKQKASATGOKTLPDPLAKSK 803

## RESULT 2

US-08-062-368-4

Sequence 4, Application US/08062368

Patent No. 5491086

GENERAL INFORMATION:

APPLICANT: Gelfand, David H.

APPLICANT: Wang, Alice M.

TITLE OF INVENTION: Purified Thermostable Nucleic Acid

TITLE OF INVENTION: Polymerases Enzyme From Pyrodicticum Species

NUMBER OF SEQUENCES: 35

CORRESPONDENCE ADDRESS:

ADDRESSEE: Hoffmann-La Roche Inc.

STREET: 340 Klingelnd Street

City: Nutley

STATE: New Jersey

COUNTRY: U.S.A.

Zip: 07110

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/062.368

FILING DATE: 19930514

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Sias Ph.D., Stacey R.

REGISTRATION NUMBER: 32,630

REFERENCE/DOCKET NUMBER: 8584

TELECOMMUNICATION INFORMATION:

TELEPHONE: (510) 814-2863

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INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 803 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

062-368-4

ch 72.3%, Score 3028.5, DB 1, Length 803;

Best Local Similarity 70.8%; Pred. No. 1e-270;  
 Matches 570; Conservative 106; Mismatches 122; Indels 7; Gaps 5;

QY 1 MTEV-FTVLDSSYEVEKPEVITWIAENGERVLLIDRSFRYPALLAPGADP--KQ 57.  
 DB 1 MTEIEFVLDDSSYEILGKEPVILMGITLDGKRVLLDHRFRYPYVALLARGVDMWE 60  
 QY 58 VQARIPRLSPKPIIGVEDDKKRPFRPRVLRIRIVLPAVAREYRELKXNVGDGVDVL 117  
 DB 61 IASIRKLSVYKSPILDAKLDRKYPFRKAVKITIMPEVSHYRAVKKIEGVEDSL 120  
 QY 118 EADIRFMRYLIDHDLEPFTMYRVEAPLENKGFVRDXYLVYSRPPYXGEALAPTKL 177  
 DB 121 EADIRFMRYLIDKRLVFTYTRIVPADAGNPFGRVDRYKVGADPEPL--ADITRIDL 178  
 QY 178 PDRLIAFDIEVYSKQSPRPDPVIVIAKTDGDEVLFIAEGDKRPFIREFVEYVK 237  
 DB 179 PMRLVAFDIEVYSRQSPRPADPVIIIVLROSEGERLILAGHDDRVLREFEVYR 238  
 QY 238 RYDPDIIYGNNNHFPMPYILRLARILIGLVDTRVGAEPPTSVAHVSVPGRINDVLY 297  
 DB 239 AFDPDIIYGNNSHFPMPYILMERARRIGIMDVTRVGAEPPTSVAHVSVPGRINDVLY 298  
 QY 298 DYAEEMPEIKISLEAEVYLVGKKSERYIINWMEIPDYMDPKKRPIILOVAPDDVRA 357  
 DB 299 DYAEEMPEIKMLEAEVYLVGKKSERYIIEWMRIPEYWDKSKQLERVALDDVRA 358  
 QY 358 TYGLAEKILPFAIQLSYVTGLPLDOVANSVGFLEWYLLRAAFKMKELVNNRVERPEET 417  
 DB 359 TYGLAEKMLPFAIQLSTVGVPLDOVANGVFRLEWYLLRAAVADNIELVNNRVERGES 418  
 QY 418 YRGAIVLEPLRGVHNIIVLDFSSMTPTNMTKYNVDPDLVPRGKCGEC-GCAEAPVYK 476  
 DB 419 YKGAIVLEPLRGVHNIIVLDFSSMTPTNMTKYNVDPDLVPRGKCGCYVAEVEVG 478  
 QY 477 HRRFRCPGFEKTVLRLLELRKRVRAEMKYPDPSPRYLLDROKALKYLANASGYM 536  
 DB 479 HRRFRSPGFEKTVLRLLELRKRVRAEMKYPDPSPRYLLDROKALKYLANASGYM 538  
 QY 537 GWSGARVYCRECAKAVTANGRHILRTAINIARKLGKLYIGDTSLEFVYDPEKVENFIK 596  
 DB 539 GWSHAWYCKRCAEAVTANGRHILRTAINIARKLGKLYIGDTSLEFVYDPEKVENFIK 598  
 QY 597 IIEELGFEIKLEKTKYKRLFTTAKKRYAGLLEDGRIDIVGFEAVRGDMCELAKEVQTKV 656  
 DB 599 IIEELGFEIKLEKTKYKRLFTTAKKRYAGLLEDGRIDIVGFEAVRGDMCELAKEVQTKV 658  
 QY 657 VEIVLKTSEVNKAVYVYKIVKLEBKVPIEKLVTIKTSLKEETTEAPHYVAAKRLMSAG 716  
 DB 659 AEIVLNTGNVDAISYIRVVIQLRGKVPITKLIIMKLSKRIIEYEHDAHYVAAKRLMSAG 718  
 QY 717 LAGRIVSPGDKIGYIVYKGGRIISQRAPEYFMVKDPSQIDVTYYVHDIIPALRLILGY 776  
 DB 719 KEGAYVSPGDKIGYIVYKGGRIISQRAPEYFMVKDPSQIDVTYYVHDIIPALRLILGY 778  
 QY 777 FGITEKQLASATGOKTLPDPLAKK 801  
 DB 778 FGITEKQLASATGOKTLPDPLAKK 802

## RESULT 3

US-08-062-368-2

Sequence 2, Application US/08062368

Patent No. 5491086

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